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CLAIMS:

Please amend the claims as follows:

- (Currently Amended) A method for determining a time until completion for a charging process associated with a rechargeable battery, the method comprising the steps of:
 - a. providing a charger capable of coupling to the rechargeable battery, the charger comprising a means of processing data capable of identifying the rechargeable battery;
 - identifying a charging process for the rechargeable battery, the process comprising a plurality of charging states;
 - c. determining which of the plurality of charging states is being executed;
 - d. calculating a first time to completion for the state being executed;
 - e. calculating at least a second time to completion for at least one of the remaining states of the plurality of charging states; and
 - f. calculating the time to completion for the charging process by adding the first and the at least a second time to completion;

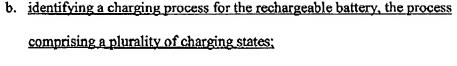
wherein each of the plurality of charging states is selected from the group consisting of trickle charging, rapid charging, initiation charging, and discharging;

wherein calculating a time to completion for the rapid charging state comprises the steps of:



- i. subtracting an amount of energy stored in the rechargeable battery
 from a maximum energy capable of being stored within the
 rechargeable battery; and
- ii. dividing by a rapid charge rate.
- (Currently Canceled) The method of claim 1, wherein each of the plurality of charging states is selected from the group consisting of trickle charging, rapid charging, initiation charging, and discharging.
- (Original) The method of claim 1, wherein the plurality of charging states comprises trickle charging, rapid charging and discharging.
- (Original) The method of claim 3, wherein the first time to completion comprises a predetermined estimate corresponding to the rechargeable battery.
- 5. (Currently Canceled) The method of claim 4, wherein calculating a time to completion for the rapid charging state comprises the steps of:
 - a. subtracting an amount of energy stored in the rechargeable battery from a maximum energy capable of being stored within the rechargeable battery;
 - b. dividing by a rapid charge rate.
- 6. (Currently Amended) The method of claim 4, A method for determining a time
 until completion for a charging process associated with a rechargeable battery, the
 method comprising the steps of:
 - a. providing a charger capable of coupling to the rechargeable battery, the charger comprising a means of processing data capable of identifying the rechargeable battery.





- c. determining which of the plurality of charging states is being executed;
- d. calculating a first time to completion for the state being executed;
- e. calculating at least a second time to completion for at least one of the remaining states of the plurality of charging states; and
- f. calculating the time to completion for the charging process by adding the first and the at least a second time to completion;

wherein each of the plurality of charging states is selected from the group consisting of trickle charging, rapid charging, initiation charging, and discharging;

wherein calculating a time to completion for the discharging state comprises the step of dividing a maximum energy capable of being stored within the rechargeable battery by a discharge rate.

- (Currently Amended) The method of claim [[4]] 1 or 6, further comprising the step of compensating for energy dissipated within the rechargeable battery pack due to self-discharge.
- 8. (Original) The method of claim 7, wherein compensating comprises:
 - a. reading a most recent battery usage time stored within the rechargeable battery;
 - b. determining a present time;
 - c. calculating an elapsed time;
 - d. dividing the elapsed time by a predetermined self-discharge rate;

subtracting a corresponding energy from an amount of energy stored within the rechargeable battery.

